

LISTING OF THE CLAIMS

1. (Currently Amended) A method of establishing a path for data transmissions in a network device having a plurality of port cards, a plurality of forwarding cards and a cross-connection card for providing a plurality of possible paths between the port cards and the forwarding cards, the method comprising:

defining a configuration policy designating internal connection paths within the device between the port cards and the forwarding cards, and

utilizing said configuration policy to configure said cross-connection card for establishing ~~one or more~~ internal connection paths between the port cards and the forwarding cards for transmitting packetized payload data therebetween ~~through the device based upon the configuration policy.~~

2. (Previously Presented) The method of claim 1, wherein the configuration policy comprises a configuration policy file stored within the network device.

3. (Previously Presented) The method of claim 2, wherein the configuration policy file is stored within a configuration database within the network device.

4. (Previously Presented) The method of claim 1, wherein the configuration policy may be dynamically changed within the system while the ~~system~~ network device continues to operate.

5. (Previously Presented) The method of claim 1, further comprising:

changing established internal connection paths through the network device based upon a configuration policy and changing resource needs.

6. (Previously Presented) A method of establishing a path for data transmissions in a network device having a plurality of possible paths through a cross-connection card comprising
establishing internal connection paths through the cross-connection card based upon a configuration policy.

7. (Previously Presented) The method of claim 6 wherein the method further comprises applying the configuration policy based on available device resources and needs at a given time.

8. (Previously Presented) The method of claim 6 wherein the method further comprises creating a table in a configuration database to provide connection information to the device.

9. (Original) The method of claim 8 wherein the step of creating a table further comprises creating a path table.

10. (Original) The method of claim 8 wherein the step of creating a table further comprises creating a service endpoint table.

11. (Original) The method of claim 8 wherein the method further comprises establishing a partial record in a service end point table when a user connects to a particular port on a universal port card in the system.

12. (Original) The method of claim 11 wherein the method further comprises: sending a notification based on the partial record to a policy provisioning manager.

13. (Original) The method of claim 6 wherein the method further comprises implementing a connection policy based on a comparison of at least one new path characteristic with available resources on a forwarding card.

14. (Original) The method of claim 13 wherein the comparison step further comprises comparing a desired number of time slots with available forwarding card resources.

15. (Original) The method of claim 13 wherein the comparison step further comprises comparing a desired number of virtual circuits with available forwarding card resources.

16. (Original) The method of claim 6 wherein the method further comprises storing configuration table settings in persistent storage to ensure that the configuration settings are maintained in the event of a system shut down.

17. (Previously Presented) The method of claim 1, wherein the device comprises a router.

18. (Previously Presented) The method of claim 6, wherein the configuration policy comprises a configuration policy file stored within the device.

19. (Previously Presented) The method of claim 18, wherein the configuration policy file is stored within a configuration database within the device.

20. (Previously Presented) The method of claim 6, wherein the configuration policy may be dynamically changed within the device while the device continues to operate.

21. (Original) The method of claim 6, further comprising:

changing established internal connection paths based upon a configuration policy and changing resource needs.

22. (Previously Presented) The method of claim 6, wherein the network device comprises a router.

23. (Currently Amended) A computer network device, comprising:

a cross-connection card comprising a plurality of programmable paths internal to said device;

a plurality of forwarding cards including a plurality of ports coupled to the cross-connection card;

a plurality of physical cards including a plurality of ports coupled to the cross-connection card,

a configuration policy file stored within the computer device; and

a policy provisioning manager for programming the plurality of programmable paths using the configuration policy file,

wherein the plurality of the programmable paths connect ports of the forwarding cards with particular ports of the physical cards through the cross-connection card.

24. (Previously Presented) The computer device of claims 23, wherein the computer network device comprises a router.

25. (Canceled)

26. (Original) The method of claim 12, further comprising:
filling in the partial record with data from the policy provisioning manager.

27. (Original) The method of claim 6, further comprising:
implementing a connection policy to establish the path for data transmissions;
modifying the connection policy; and
using the modified connection policy to establish the path for data transmission.

28. (Original) The method of claim 27, wherein the connection policy is stored in a configuration database.

29. (Currently Amended) In a network device comprising at least one port for receiving data from an external device, ~~and~~ a plurality of forwarding systems for processing the received data and a cross-connection switch for coupling the port to the forwarding systems, a method of establishing a path between said port and at least one of said forwarding systems, comprising:

defining a configuration policy for designating said ~~at least one~~ port to at least one of said forwarding systems, and

utilizing said configuration policy to establish an internal connection path between said port and said at least one of said forwarding systems through the cross-connection switch.

30. (New) The method of claim 29, wherein said configuration policy causes the cross-connection card to establish said internal connection path regardless of information contained in the payload.